Appl No. 09/943,232 Amdt. dated Aug. 3, 2005 Reply to Office action of May 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of wireless network communication comprising:

communicating over a plurality of carriers <u>using an adaptive array antenna</u>
between at least one network access point and a plurality of clients;

monitoring at least one dedicated carrier with an omni-directional antenna for new clients seeking to associate with the network;

detecting a new client over the at least one dedicated carrier; and associating the new client to the network.

- (Currently Amended) The method of claim 1 wherein the step of communicating over a plurality of carriers comprises communicating over orthogonal frequency domain division multiplexing frequencies.
- 3. (Original) The method of claim 1 wherein the step of communicating over a plurality of carriers comprises employing at least one adaptive directional antenna on the at least one access point.

Claims 4 and 5. (Cancelled)

6. (Currently Amended) An implementation for network communication comprising:

at least one network access point for communicating with a plurality of clients

over a plurality of carriers;

means for monitoring at least one dedicated carrier selected from the plurality of carriers for new clients seeking to associate with the network with an omni-directional antenna;

means for exchanging data with the plurality of clients with unselected carriers from the plurality of carriers employing an adaptive array antenna.

means for detecting a new client over the at least one dedicated carrier; and means for associating the new client to the network.

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- 7. (Currently Amended) The implementation of claim 6 wherein the plurality of carriers comprises orthogonal frequency domain division multiplexing frequencies.
- 8. (Currently Amended) The implementation of claim [[1]]6 wherein the at least one network access point comprises at least one adaptive directional antenna employed for communicating over the plurality of carriers.

Claims 9-10 (Cancelled)

- 11. (New) The method of claim 1, wherein the communicating and monitoring occur concurrently.
- 12. (New) The implementation of claim 6, wherein the means for monitoring and the means for exchanging data operate concurrently.
- 13. (New) An access point for operating on a plurality of frequencies, wherein at least one of the plurality of frequencies is a selected frequency and the remaining of the plurality of frequencies are unselected frequencies, comprising:

an adaptive antenna array;

a first transmit circuitry and first receive circuitry for communicating with clients associated with the access point, the first transmit and first receive circuitry coupled to the adaptive antenna array and using the unselected frequencies;

an omni-directional antenna; and

- a second transmit circuitry and second receive circuitry for communicating with clients, the second transmit circuitry and second receive circuitry coupled to the omni-directional antenna and using the selected frequency.
- 14. (New) The access point of claim 13, wherein one of the group consisting of the first transmit circuitry and first receive circuitry operate concurrently with one of the group consisting of the second transmit circuitry and the second receive circuitry.

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- 15. (New) The access point of claim 13, wherein the adaptive antenna array forms at least one directional antenna.
- 16. (New) The access point of claim 13, wherein the plurality of carriers the plurality of carriers comprises orthogonal frequency division multiplexing frequencies.
- 17. (New) The access point of claim 13, wherein the selected frequency is used for associating new clients and the unselected frequencies are used for other data transmissions.
 - 18. (New) The access point of claim 13, wherein:

at least one of the group consisting of the first transmit circuitry and first receive circuitry operate concurrently with at least one of the group consisting of the second transmit circuitry and the second receive circuitry;

the adaptive antenna array forms at least one directional antenna;

the plurality of carriers the plurality of carriers comprises orthogonal frequency division multiplexing frequencies; and

the selected frequency is used for associating new clients and the unselected frequencies are used for other data transmissions.